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EXAMINER	
GARCIA, ERNESTO	
ART UNIT	PAPER NUMBER
3679	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/806,304	BROCHEZ, ALAIN	
	Examiner	Art Unit	
	ERNESTO GARCIA	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2009 and 17 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *85-92,95 and 96* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *85-92,95 and 96* is/are rejected.

7)☒ Claim(s) *88 and 96* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 August 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 17, 2009 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office.

Drawings

The drawings were received on August 17, 2009. These drawings are accepted. However, after a further review of the forces involved as claimed, the examiner has found that not all forces have been shown to understand the claimed invention.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “press-on elements

provided on the corner piece to push the inner sides of the insert parts against an inner wall of the respective attachment channel" (claim 95, lines 7-8) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Note that Figure 6 only shows elastically bendable flaps 43, 45.

The drawings are objected to because the inclined parts 34 should contain boundary lines, such as hidden lines, to understand what entails "a fragment of the first leg 26" as described on page 9, line 28, of the substitute specification filed on January 31, 2003. Currently, reference characters "26" and "34" show the first leg and the inclined part being the same fragment.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

in the paragraph starting on page 7, line 22 of the substitute specification, the terminology associated with reference character “20” is inconsistent throughout the paragraph. Note that “20” has been defined as both a “side” and a “free end”; and,

in the paragraph starting on page 10, line 31, which was amended on July 20, 2007, “Inner” in line 3 should be --inner--. Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the recitation "the resilient member comprising said second leg and a connecting leg situated in an extension of said second leg" recited in claim 92, lines 2-3, lacks proper antecedent in the specification. Note that the change “these parts 5, 6 consists of a second leg 27 and a connecting leg 28 extending therefrom on the paragraph starting on page 11, line 4, does not make reference to any resilient members comprising the second leg and the connecting leg. Accordingly, this paragraph starting on page 11, line 4, requires further correction. Further, recitation

“compression force” in claim 85, line 23, lacks proper antecedent basis since the disclosure rather says that Figure 3 shows a pressure force F1 and the examiner wonders whether the force is one and the same or another force. If the forces F1 are the compression forces, then the specification should be amended to reflect that the forces F1 are rather compression forces.

Further, the recitation “compression force has been created in the side members ends by pushing off both frame side members on the lips” recited in claim 85, lines 20-21, require proper antecedent basis in the disclosure. Note that this previous objection has not been addressed by the applicant.

Claim Objections

Claims 85, 86, 91, 92, and 95 are objected to because of the following informalities:

regarding claim 85, "projection" in line 14 should be deleted, --each of-- should be inserted after “in” in line 23, and --respectively-- should be inserted after “members” in line 24;

regarding claim 86, “projection” in line 3 should be deleted;

regarding claim 91, “a” in line 4 should be --an imaginary-- since the current version appears to positively indicate that the inclined part is literally prolonged when the inclined part is not prolonged;

regarding claim 92, --a-- should be inserted before "reactive" in line 6; and,

regarding claim 95, "when positioned therein" in lines 3-4 should be deleted as the insert parts have been previously set forth being positioned in the channel in claim 85, and the occurrence of "the" in line 7 should be deleted. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 112

Claims 85-92, 95, and 96 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 85, it seems that the description "compression force" in line 23 is misdescriptive and should rather be --pressure force-- since Figures 1 and 3 and the disclosure rather describe a pressure force F1. The recitation "pushing off both frame side members on the lips" in line 24 is unclear. In particular, since the lips are part of the frame side members how does one "push off" the side members on the lips? The recitation "the corner piece comprising inclined parts defining a pressure zone between the lips and a place on the inner wall which is situated deeper in the attachment channels than the lip" in lines 25-28 makes unclear how the inclined parts 34, which are a fragment of the first leg 26 as stated on page 9, line 28-29, define a pressure zone

especially when the lips and the place which is deeper in the attachment channels are away from the inclined part 34. The recitation "the inclined parts create tensile forces in the resilient members" in lines 36-37 makes unclear how the inclined parts 34, “which are a fragment of the first leg 26, as stated on page 9, lines 28-29, create tensile forces. The recitation “the pressure in the inclined parts” in line 37 lacks proper antecedent basis. Note that the claim has not set forth that the pressure is applied in the inclined parts. Rather, the pressure is on both frame side members as indicated in lines 16-17. The recitation “a pressure” in line 28 makes unclear whether this is another pressure than that recited in line 16 or the same pressure

Further, the recitation “a tension” in line 37 makes unclear whether this is another tension than that recited in line 17, or the same tension. The recitation “the tensile forces in the resilient members resulting in pressure forces in the outer and inner walls”, in lines 39-40, makes unclear how the tension forces result pressure forces. It seems that this is a method-step limitation and the claim does not state have the tension forces are converted to pressure forces. Further, the recitation "pressure forces", in line 39, makes unclear whether this is a different force than the “compression force”, in line 23, or the same force.

Regarding claim 91, the metes and bounds of the claim is unclear. In particular, how does reciting a panel further limiting the corner joint? Further, it is unclear where the panel is wedged up by the wedges.

Regarding claim 92, the recitation "the resilient member" in line 2 makes unclear to what resilient member is being referred to when claim 85, line 29, previously set forth "resilient members" (i.e., plural members).

Regarding claims 86-90, 95, and 96, the claims depend from claim 85 and therefore are indefinite.

Claim Rejections - 35 USC § 103

Claims 85, 86, 95/85 and 95/86 are rejected under 35 U.S.C. 102(b) as being anticipated by Centa, 4,637,752, in view of Heggen, WO-91/15314, and Ekstein, 3,797,194.

Regarding claim 85, as best understood, Centa discloses, in Figures 4 and 6, a corner joint comprising two frame side members **21** and at least one corner piece **9**. The side members **21** have attachment channels **25** and mitered end portions (the miter portions). The corner piece **9** has two insert parts joined at connecting ends and positioned relative to one another at a predetermined angle (90 degrees). Each of the insert parts is configured to be received by the mitered end portions of the attachment channels **25**. The attachment channels **25** are confined by an inner wall and an outer wall (outer wall has an elongated slot). A mutual interlocking is between the corner

piece and the frame side member and carried by lips **26** defined by a pressed-in material part of the outer wall. The lips **26** cooperate with notches **13** defined on the corner piece **9**. Each of the insert parts includes at least one of the notches **13** comprising a shape defined by a first side and a second side 14 over which a free end of the lip is pressed in. The lips **26** generate pre-stress as pressure on both of the side members **21** and tension in the corner piece **9**. The material of the lips **26** is compressed from a first length to a second length, which is shorter than the first length (note that the lip becomes pressed against the first side and inherently becomes compressed as a function of how much punching force is impacted on the lip). A pressure force is created in each of the frame side members ends by lips.

The corner piece **9** comprises inclined parts **A1** (see marked-up attachment) defining a pressure zone between the lips **26** and a place on the inner wall which is situated deeper in the attachment channels **25** than the lips **26**. The insert parts are equipped with resilient members **A2** (see marked-up attachment) which are connected to one another at an angle. The inclined parts are respectively connected to free ends of the resilient members (note that this is indirectly connected).

The inclined parts create other tensile forces in the resilient members since other pressure in the inclined parts results in another tension in the resilient members. The other tensile forces in the resilient members result in other pressure forces in the outer and inner walls thus contributing to rigidity and the press-stress. The resilient members

are positioned generally along and in contact with the inner wall of the attachment channels **25**.

However, Centa fails to disclose the shape of the notch being triangular defined by a first side against which the lip **26** is positioned being longer than the second side 14 over which the free end of the lip **26** is pressed in. Further, Centa fails to disclose a free space or clearance free of material provided on an outside corner of the corner piece **9** and the free space or clearance extending from the lips **26** to at least the connecting end of the insert parts.

Heggen teaches, in Figure 4, a triangular shape of a notch being defined by a first side **2** against which a lip **4** is positioned being longer than a second side **2** over which an end of the lip **4** is pressed in to correspond in shape of the lip thus providing a joint that resists high compression forces and simultaneously resisting high tensile forces (page 4, lines 25-28). Therefore, as taught by Heggen, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the shape of the triangle defined by a first side against which the lip is positioned being longer than a second side over which an end of the lip is pressed in to create a joint that resists high compression forces and simultaneously resist high tensile forces.

Ekstein teaches, in Figure 2, a free space or clearance free of material provided on an outside corner of a corner piece, and the free space or the clearance extending

from lips to at least a connecting end of insert parts to reduce the amount of material used to make the corner piece thus reducing its weight. Therefore, as taught by Ekstein, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a free space or a clearance free of material provided on an outside corner of the corner piece of Centa such that the free space or the clearance extends from the lips to at least the connecting end of the insert part of Centa to reduce the amount of material used to make the corner piece thus reducing its weight.

Regarding claim 86, given the modification, the second side **14** would have extended substantially perpendicular to a longitudinal direction of the lip **26**.

Regarding claim 95/85 and 95/86, given that there would be a space or clearance due to the addition of a position element **78**, **79**, as taught by Ekstein, the modification would have suggested the corner piece provided with an arrangement of positioning elements **78**, **79** and the positioning elements being elastic press-on elements provided on the corner piece since Ekstein suggests that the corner piece is made to bend and acquire characteristics of a spring (co. 2, lines 60-65) thus allowing an outer wall of the channel to rest on the positioning elements thus providing support. Therefore, as taught by Ekstein, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include positioning elements being elastic press-on elements provided on the corner piece to have the outer wall of the channel rest on the positioning elements thus providing support.

Claims 87 and 95/87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Centa, 4,637,752, in view of Ekstein, 3,797,194, as applied to claims 85, 86, 95/85, and 95/86, and further in view of Rottener, DE-2522523 (note that the German document has been labeled as DT-2522523).

Regarding claim 87, Centa, as modified by Ekstein, fails to disclose the second side of the notch having a bent shape. Rottener teaches, in Figure 2, a second side of a notch having a bent shape **8a** (curved shape) so that the lip does not encounter a sharp corner versus one with a rounded corner. Therefore, as taught by Rottener, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the second side of the notch with a buckled shape (curved shape) to prevent the lip encountering a sharp corner versus one that is buckled shaped, i.e., curved shaped.

Regarding claim 95/87, given that there would be a space or clearance due to the addition of a position element **78**, **79**, as taught by Ekstein, the modification would have suggested the corner piece provided with an arrangement of positioning elements **78**, **79** and the positioning elements being elastic press-on elements provided on the corner piece since Ekstein suggests that the corner piece is made to bend and acquire characteristics of a spring (co. 2, lines 60-65) thus allowing an outer wall of the channel to rest on the positioning elements thus providing support. Therefore, as taught by

Ekstein, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include positioning elements being elastic press-on elements provided on the corner piece to have the outer wall of the channel rest on the positioning elements thus providing support.

Claims 89, 90, 92, 95/89, 95/90, and 95/92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Centa, 4,637,752, in view of Ekstein, 3,797,194, as applied to claims 85, 86, 95/85, and 95/86, and further in view of Flechner, FR-2,734,599.

Regarding claim 89, Centa, as modified, fails to disclose the insert parts including an end portion geometrically in the shape of a triangle having an apex directed along a longitudinal axis of the respective attachment channel, each insert part defining a second leg arranged to be urged against the inner wall of the respective attachment channel, a first leg connecting at a first end with a first end of the second leg to form the apex and extending at an oblique angle relative to the second leg in a direction generally proximal to the corner portion and a third leg extending obliquely relative to the second leg in a direction generally proximal to the corner portion and connecting to the second leg. Flechner teaches, in Figure 2, insert parts each including an end portion geometrically in the shape of a triangle having an apex directed along a longitudinal axis of the respective attachment channel **11** (note that the triangle has three apexes and the one near the inner wall anticipates the language), and each insert part **27**, **28** defining a second leg urged against the inner wall of the respective

attachment channel. Flechner further teaches a first leg (the one with feature 16) connecting at a first end with a first end of the second leg to form the apex and extending at an oblique angle relative to the second leg in a direction generally proximal to the corner portion and a third leg extending obliquely relative to the second leg in a direction generally proximal to the corner portion and connecting to the second leg to allow the corner piece to be inserted into the attachment channel using guiding surfaces of the legs or to reduce the weight of the corner piece by using triangular parts. Therefore, as taught by Flechner, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the insert parts of Centa with insert parts having en end portion in the shape of a triangle to allow the insert parts to be inserted into the attachment channels with ease or to reduce the weight of the corner joint.

Regarding claim 90, given the modification, each of the inclined parts would have been a fragment of the first leg of the corresponding insert part.

Regarding claim 92, given the modification, the resilient member would have been comprised of the second leg and a connecting leg situated in an extension of the second leg. Further, the end portion and the resilient member of each of the insert parts would have been connected to one another at an angle.

Regarding claims 95/89, 95/90, and 95/92, given that there would be a space or clearance due to the addition of a position element **78**, **79**, as taught by Ekstein, the modification would have suggested the corner piece provided with an arrangement of positioning elements **78**, **79** and the positioning elements being elastic press-on elements provided on the corner piece since Ekstein suggests that the corner piece is made to bend and acquire characteristics of a spring (co. 2, lines 60-65) thus allowing an outer wall of the channel to rest on the positioning elements thus providing support. Therefore, as taught by Ekstein, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include positioning elements being elastic press-on elements provided on the corner piece to have the outer wall of the channel rest on the positioning elements thus providing support.

Claims 91 and 95/91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Centa, 4,637,752, in view of Ekstein, 3,797,194 and Flechner, FR-2,734,599, as applied to claims 89, 90, 92, 95/89, 95/90, and 95/92, and further in view of Rhodes, EP- 412,669.

Regarding claim 91, Centa discloses the corner joint further comprises a panel **44**. However, the panel is not wedged up by wedges and the middle of the wedges is not situated in an imaginary prolongation of the inclined parts. Rhodes teaches, in Figure 1-3, retaining a panel with wedges **46**, **48** to wedge the panel between the frame side members thus making difficult and time consuming to remove the panel during

burglary (col. 1, lines 33-35). Therefore, as taught by Rhodes, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide wedge members to retain the panel of Centa between the frame side members thus making the panel from being removed with difficult during burglary.

Regarding claim 95/91, given that there would be a space or clearance due to the addition of a position element **78**, **79**, as taught by Ekstein, the modification would have suggested the corner piece provided with an arrangement of positioning elements **78**, **79** and the positioning elements being elastic press-on elements provided on the corner piece since Ekstein suggests that the corner piece is made to bend and acquire characteristics of a spring (co. 2, lines 60-65) thus allowing an outer wall of the channel to rest on the positioning elements thus providing support. Therefore, as taught by Ekstein, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include positioning elements being elastic press-on elements provided on the corner piece to have the outer wall of the channel rest on the positioning elements thus providing support.

Allowable Subject Matter

Claims 88, 95/88, and 96 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

regarding claim 88, the prior art of record does not disclose or suggest a corner joint comprising stop parts including serration. The closest prior art, Ekstein, 3,797,194, disclose stop parts 178, 78. However, these do not include a serration and there no motivation to include one without the applicant's own disclosure;

regarding claim 95, this claim depends from claim 88; and,

regarding claim 96, the prior art of record does not disclose or suggest a corner joint comprising a corner piece including a clearance generally defined at an inside corner where insert parts connect and the corner piece having a hook-shaped profile. The closest prior art of record, Rottner, DE-2,522,523, and Centa, 4,637,752, only discloses a square or round recess.

Response to Arguments

Applicant's arguments with respect to claims 85-94 have been considered but are moot in view of the new grounds of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Crotti et al., 4,090,799, teaches making a corner piece that is

entirely solid or hollowed. Amrogowicz, DE-2,315,380, and Diehm, DE-2,500,937, both teach lips defined by a press-in material part of an outer wall. Kopke, DE-2,300,281, teaches insert parts configured in the same of a triangle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30AM-6:00PM. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/E. G./

Examiner, Art Unit 3679

October 15, 2009
Attachment: one marked-up page of Centa, 4,637,752

/Daniel P. Stodola/
Supervisory Patent Examiner, Art Unit 3679

Centa, 4,637,752

FIG.4